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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,084	09/11/2000	Nandu Gopalakrishnan	3-2-5-2-14-1-7-13	4587
22046	7590 05/18/2004		EXAM	IINER
LUCENT TECHNOLOGIES INC.			WILSON, ROBERT W	
DOCKET ADMINISTRATOR				Ÿ:
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DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
	09/658,084	GOPALAKRISHNAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Robert W Wilson	2661				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 04 N	Responsive to communication(s) filed on <u>04 May 2004</u> .					
<i>'</i> =	☐ This action is FINAL . 2b)☐ This action is non-final.					
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closed in accordance with the practice under E	±x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-26 is/are pending in the application	4)⊠ Claim(s) <u>1-26</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>1-23 and 26</u> is/are allowed.	Di⊠ Claim(s) <u>1-23 and 26</u> is/are allowed.					
	Claim(s) <u>25</u> is/are rejected.					
7) Claim(s) is/are objected to.	ur alastian raquirament					
8) Claim(s) are subject to restriction and/o	n election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) \boxtimes The drawing(s) filed on <u>30 April 2004</u> is/are: a) \boxtimes accepted or b) \square objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	•					
11) The oath or declaration is objected to by the Ex	kammer. Note the attached Office	Action of form FTO-132.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document	ts have been received. Is have been received in Applicati Irity documents have been receive	ion No				
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 		ate Patent Application (PTO-152)				

- Application/Control Number: 09/658,084

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DETAILED ACTION

1.0 The application of Nandu Gopalakrishnan et al. for a "Integrating Power-Controlled and Rate-Controlled Transmissions On A Same Frequency Carrier" filed 09/11/2000 and amended on 5/4/04 has been examined. Claims 1-24 & 26 are pending.

Claim Rejections - 35 USC § 103

- 2.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3.0 Claims 24 is rejected under 35 U.S.C. 103(a) as being obvious over Vanghi et al. (U.S.

Patent No.: 6,393,276 B1)

Referring to Claim 24, Vanghi et al. (U.S. Patent No.: 6,393,276) teaches: A method of determining a data rate (Fig 2) comprising the steps of:

Receiving signal-to-interference measurements from a plurality of receivers (It would have been obvious to one of ordinary skill in the art at the time of the invention that each BS has more than one mobile in order for the invention to work. The mobile reports SNR to the Base per Fig 2);

Determining data rates based on available transmit power and the received signal-to-interference measurements (BSC determines data rates and channel power based upon SNR per Fig 2 or col. 5 lines 62-67)

Transmitting data to one of the plurality of the receivers at the determined data rates (The BSC determines data rate per Fig 2 and per 152 per Fig 3.) and

Scheduling the plurality of receivers for time slotted data transmission based on determined data rates (The BSC assigns the data rate on a channel basis per 153 per Fig 3. It would have been obvious to one of ordinary skill in the art at the time of the invention that the assigned data rate would be utilized by the receiver in order for the invention to work)

Vanghi does not expressly call for: signal-to-interference but teaches SNR per Fig 2.

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It would have been obvious to one of ordinary skill in the art at the time of the invention that SNR or signal to noise ratio is the same as signal to interference ratio because they both perform the same function.

Allowable Subject Matter

4.0 The present invention is directed to a communication device which the receiver measures SIR as well as determines data rate based upon SIR and available transmit power upon receiving an available power message from the transmitter. The receiver sends a data rate message to the transmitter based upon SIR measured at the receiver.

The closest prior art is Vandghi (U.S. Patent No.: 6,393,276 B1), Corazza (U.S. Patent No.; 6,563,810 B1), and Larijani (U.S. Patent No.: 6,603,746 B1). The closest prior art Vandghi (U.S. Patent No.: 6,393,276 B1) discloses a mobile station that measures SNR and reports the SNR to the Base or transmitter. The Base or transmitter determines power and data rate. The mobile or receiver does not receive an available power message from the base. The closest prior art Corazza (U.S. Patent No.; 6,563,810 B1) discloses a subscriber or receiver measures SNR or SIR and determines data rate and available headroom or transmit power but does not disclose that the subscriber or receiver receives and available power message from the base or transmitter. The closest prior art Larijani (U.S. Patent No.: 6,603,746 B1) discloses a control system or receiver measures SIR and bit rate or data rate. The control system or receiver sends the power control message or available power message not the transmitter.

The closest prior art Vandghi (U.S. Patent No.: 6,393,276 B1), Corazza (U.S. Patent No.; 6,563,810 B1), and Larijani (U.S. Patent No.: 6,603,746 B1) do not disclose either singularly or in combination and do not anticipate or render obvious the following claim limitations:

"receiving an available power message at the receiver indicating future available transmit power at the transmitter" as claimed in **Claim 1**.

In Addition:

Claims 2-13 & 26 are allowed because they depend on Claim 1.

"transmitting an available power message to a receiver indicating future available transmit power at a transmitter" as claimed in Claim 14.

In Addition:

Claims 15-21 are allowed because they depend on Claim 14.

"receiving an indication of data rate based on available transmit power at the transmitter and the measured signal-to-interference" as claimed in **Claim 22.**

In Addition:

Claim 23 is allowed because they depend on Claim 22.

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Response to Amendment

5.0 Applicant's arguments filed 5/4/2000 have been fully considered but they are not persuasive.

The examiner respectively disagrees with the applicant argument that the reference Vanghi (U.S. Patent No.; 6,393, 276) fails to show or disclose: "scheduling the plurality of receivers for time slotted data transmission based on the determined data rates". Vanghi (U.S. Patent No.; 6,393, 276) teaches: "scheduling the plurality of receivers for time slotted data transmission based on the determined data rates" per 152 of Fig 3.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Robert W. Wilson

Examiner

Art Unit 2661

RWW May 10, 2004.